

From: [Benjamin, Erskine](#)
To: [Louis, Gail](#)
Cc: [Swann, Veronica](#)
Subject: RE: Canyon Mine (uranium) - update
Date: Tuesday, September 01, 2015 12:20:00 PM

Thanks Gail!

Veronica, FYI...

Erskine D. Benjamin II | Environmental Engineer
Water Division | Tribal Water Office (WTR-3-4)
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From: Louis, Gail
Sent: Tuesday, September 01, 2015 12:19 PM
To: Benjamin, Erskine
Subject: FW: Canyon Mine (uranium) - update

FYI -

From: Albright, David
Sent: Tuesday, September 01, 2015 10:35 AM
To: Louis, Gail; Ebbert, Laura
Subject: FW: Canyon Mine (uranium) - update

FYI – Havasupai tribe has challenged this mining action previously. As noted below, the site is about 35 miles upstream from Havasupai Reservation.

From: Rao, Kate
Sent: Tuesday, September 01, 2015 10:09 AM
To: Albright, David; Li, Corine; Smith, DavidW
Cc: Montgomery, Michael; Woo, Nancy
Subject: Canyon Mine (uranium) - update

[David / Corine / Dave](#) –

(b) (5) [REDACTED]
[REDACTED]
[REDACTED]

Mining Action: The mine is a deep mine shaft. The uranium is found in a long, vertical column of ore. It is dug out, no in-situ solution mining.

AIR Approval: EPA/Air Division received an “application to construct” the underground Canyon [uranium] Mine. Construction on the mine was initially begun many years ago but discontinued due to falling uranium prices. The mine is subject to a National Emissions Standard for Hazardous Air (NESHAP) emission standard under 40 CFR Part 61, Subpart B, limiting emissions of radon from the ventilation of uranium mines. The emissions limit is a 10 millirem/year dose to a maximally exposed person. It appears that the mine will comply with the standard. The Air Division will be granting an approval to construct in the next couple of weeks.

Below is information from the company about water issues:

There are no water issues associated with the Canyon Mine. The facility is a zero discharge facility. Berms around the facility are designed to ensure that no surface runoff from outside of the Area of Operations is allowed to enter the Area of Operations. The Area of Operations has been designed to ensure internal drainage of rainwater into the on-site stormwater evaporation pond. The on-site stormwater evaporation pond has also been designed to contain and evaporate any water encountered during mining which cannot be utilized in connection with mining.

The Final Environmental Impact Statement for the mine concluded that adverse impacts to groundwater from the mine are extremely unlikely. The Redwall-Muav aquifer is at least 1,000 ft. below the lowest part of the Mine. The current drinking water well is sampled to ensure no impacts to groundwater.

The mine has a Type 3.04 Aquifer Protection Permit issued by the State of Arizona, and an Arizona State general Stormwater Discharge Permit.

As is typical for breccia pipe mines, and as contemplated in the FEIS and Aquifer Protection Permit, a small amount of water has been encountered during initial shaft sinking at the mine. However, it is anticipated that this small amount of water will diminish as shaft sinking continues and will not be sufficient for mining operations (dust control etc.) and that, as is typical for other breccia pipe mines, additional water will need to be utilized in connection with mining.

Please let me know if you have any questions or need more follow-up.

Kate

Kate Rao
Drinking Water Protection Section (WTR 3-2)
USEPA Region 9
75 Hawthorne St., San Francisco, CA 94105
tel: (415) 972-3533 / fax: (415) 947-3549

From: Rao, Kate

Sent: Friday, June 19, 2015 2:21 PM

To: Albright, David; Li, Corine

Cc: evans-walker, daria; Montgomery, Michael; Banks, Karl

Subject: FW: AZ Reporter call - uranium mine (drinking water/ground water concerns????)

David/Corine –

There was a media inquiry this week about Canyon Uranium Mine in AZ. Owners are trying to reopen the mine. However, uranium ore production has never occurred at the site b/c the mine shaft has not yet been fully sunk. Grand Canyon Trust, Center for Biological Diversity, Sierra Club and Havasupai Tribe are against uranium mining at this location and have appealed the approval of the mine site.

Below is some background (goes back to 1985) and some recent info/articles. There may be drinking water impacts (both State and tribal) so I am bringing this to your attention. At this point, there is no action since we missed the reporter's deadline but it is likely we will get more inquiries on this issue. If either of you have any information on drinking water/ground water concerns and impacts from the proposed mining activities, please let me know.

Canyon Uranium Mine (owner: Energy Fuels Inc.)

- 6 miles southeast of the town of Tusayan.
- 35 miles southeast and upstream from the Havasupai Reservation.
- EPA commented on draft EIS in 1985 and rated it Environmental Concerns – Insufficient Information. We asked for more info on NPDES permit requirements and ground water impacts. Final EIS issued in 1986 and adequately addressed EPA concerns.
- EPA's opinion was no NPDES permit needed b/c no discharge to WOUS.
- Milling site is White Mesa Uranium Mill in Blanding, Utah.
- Attached is EPA internal document from 1992 that provides background information.

Articles and Information

Grand Canyon Trust: map of uranium mines

(http://www.grandcanyontrust.org/sites/default/files/UraniumClaims_GrandCanyonRegion.pdf)

Center for Biological Diversity, Press Release (April 2015): [Federal Judge Oks Uranium Mining Next to Grand Canyon National Park, Decision Allows Mining Without Tribal Consultation or Update Decades-old Environmental Review](#)

[NOTE: This letter states that gw threatened by the mine feeds municipal wells and seeps into Havasu Springs and Havasu Creek. An APP issued by ADEQ did not require monitoring of deep aquifers.]

USDA Forest Service: [Canyon Uranium Mine](#)

[NOTE: this is a really good site and has current status and lots of background documentation.]

Thanks. Kate

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